

10/516,930

Page 2 of 8

1. (Currently amended) An antimicrobial ~~polymeric~~ coating composition, consisting essentially of in particular an antimicrobial coating material, comprising inorganic core-shell particles having a core and at least one shell directly deposited thereon, wherein

~~the core consists of nanoscale particles selected from the group consisting of aluminum oxide, zirconium oxide, titanium oxide, iron oxide, cerium oxide, indium-tin oxide, silicon carbide, tungsten carbide and silicon nitride, having a particle size <100 nm, and~~

~~the shell is formed by at least one metal having an antimicrobial action~~

a polymeric material and

inorganic core-shell particles having a core and at least one shell directly deposited thereon, wherein

the core consists of nanoscale particles of an inorganic material with semiconductor properties, having a particle size < 100 nm and

the shell is formed by at least one metal having antimicrobial action.

2-5. (Cancelled)

6. (Previously Presented) The coating composition of claim 1, characterized in that the metal is silver or copper.

7. (Previously Presented) The coating composition of claim 1, characterized in that the nanoscale particles which form the core possess a particle size of between 5 nm and 50 nm.

8. (Previously Presented) The coating composition of claim 1, characterized in that the coreshell particles possess a particle size of between 5 nm and 100 nm.

9. (Previously Presented) The coating composition of claim 1, characterized in that the coat thickness of the shell is between 0.1 nm and 20 nm.

10/516,930

Page 3 of 8

10. (Previously Presented) The coating composition of claim 1, characterized in that it is a water-miscible coating composition.

11. (Previously Presented) The coating composition of claim 1, characterized in that it is a coating composition based on acrylic resins or based on polyurethane.

12. (Previously Presented) The coating composition of claim 1, characterized in that it is a coating composition based on a powder coating material.

13. (Previously Presented) The coating composition of claim 1, characterized in that the coreshell particles are present in the composition in amounts of between 0.1% and 15% by weight.

14. (Previously Presented) The coating composition of claim 1, characterized in that it is present as a coat on a substrate.

15. (Previously Presented) A process for preparing an antimicrobial polymeric coating, comprising an antimicrobial coating material, comprising inorganic core-shell particles having a core and at least one shell directly deposited thereon, characterized in that the core-shell particles are produced using nanoscale particles of an inorganic material having a particle size <100 nm as a core and at least one metal having antimicrobial action is applied as a shell to at least one particle in solution or in suspension in a UV radiation induced redox reaction, and are mixed, or homogenized, with an organic polymer material.

16-17. (Cancelled)

18. (Previously Presented) The process of claim 15, characterized in that the metal is copper or silver.

10/516,930

Page 4 of 8

19. (Previously Presented) The process of claim 15, characterized in that following application of the shell the solvent is removed to obtain a powder.

20. (Previously Presented) An article characterized in that it is coated at least partly, or completely, with the coating composition of claim 1.

21-26. (Cancelled)

27. (Previously Presented) The coating composition of claim 1, characterized in that the nanoscale particles which form the core possess a particle size of between 5 nm and 20 nm.

28. (Previously Presented) The coating composition of claim 1, characterized in that the coreshell particles possess a particle size of between 10 nm and 50 nm.

29. (Previously Presented) The coating composition of claim 1, characterized in that the coreshell particles possess a particle size of between 20 nm and 45 nm.

30. (Previously Presented) The coating composition of claim 1, characterized in that the coat thickness of the shell is between 1 nm and 10 nm.

31. (Previously Presented) The coating composition of claim 1, characterized in that the coreshell particles are present in the composition in amounts of between 0.25% and 10% by weight.

32. (Previously Presented) The coating composition of claim 1, characterized in that the coreshell particles are present in the composition in amounts of 2% and 4% by weight.

33. (Previously Presented) The process of claim 19, wherein the powder obtained by the removal of the solvent is calcined.